Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

by the author. Probably no two naturalists could be found who would agree on the systematic place or relations of all the forms of Arctic Buccinidæ which have been described. But we have not seen any discussion of them with which we felt a more general accordance than that in Mr. Friele's work. In regard to the general relations of the group we feel that the limits of Troschel in this, as in many other cases, are too narrow, and his distinctions for family rank too refined and too exclusive. In dental, as in other characters, the time is at hand for naturalists, who may not yet have done so, to realize that easy transitions from one group to another exist in a majority of cases and may be found by sufficient search. The genus Jumala of Friele, bears somewhat such a relation to Strombella Gray, as Liomesus Stimpson, does to some forms of Sipho. The median plate of the radula is edentulous. In this it agrees with Beringius Dall (1879), and a doubt arises as to their distinctness from each other. The type of Beringius is *Chrysodomus crebricostatus* Dall, from Alaska. The only criticism which occurs to us relates to one of the figures. We doubt extremely whether the oötheca figured as belonging to *Buccinum terra-novæ* Beck (Pl. III, f. 16, *a-b*), does not rather appertain to a Neptunea, as it resembles precisely that of several small forms of Neptunea allied to *despecta*, familiar to us in the northern seas, while we have never met with oötheca of such form belonging to a true Buccinum.—*W. H. Dall.*

GODMAN AND SALVIN'S BIOLOGY OF CENTRAL AMERICA.[1]—This standard work on the zoölogy and botany of Central America and Mexico, though almost purely descriptive in its character, is of high value both from the carefully prepared text and well executed colored and plain plates. It will prove of particular value to the American biologist as it indicates in many cases the zoögeographical limits of many United States' species. Indeed, for a broad study of our mammalian and avi-fauna as well as our entomology, reference to this work will be indispensable. The editors, after several years' explorations in different parts of Central America, have put their collections into the hands of specialists for description. It is announced, however, that the editors will give, at the conclusion of the work, an introductory volume, wherein the physical features of the country will be described and illustrated with maps.

The mammalia have been enumerated and described by the late E. R. Alston, and the text occupies portions of the first seven numbers, and is illustrated with eighteen chromo-lithograph plates, drawn by Wolf, Smit and Keulemans, a guarantee of their excellency. Mr. Alston has brought together what little is known of the habits and distribution of the mammals. For the first time we have definite information regarding the monkeys of Central America and Mexico, comprising, as they do, perhaps, the most striking feature of the region under consideration. There are eleven species, representing two families, and six out of ten genera of American monkeys in all. The existence of monkeys north of the Isthmus of Panama was long overlooked by zoölogists, though recorded by several of the older zoölogists, notably Dampier (Voyages, 1729). Apparently the species which extends farthest north is the Mexican spider monkey (*Ateles vellerosus* Gray); it occurs in Guatemala from coast to coast. In Mexico it has not been found, according to Reichardt, north of a point in Vera Cruz, near the volcano of Orizaba, where it is common, living in small troops in the deep ravines up to an elevation of 2000 feet above the sea. Reinhardt "also found it at a height of 4000 feet in the eastern parts of Oaxaca, but never on the Pacific slope of the Cordillera in that State; and he believed that monkeys were not to be found on the western coast further north than Tehauntepec."

---

[1] *Biologia Centrali-Americana; or, Contributions to the Knowledge of the Fauna and Flora of Mexico and Central America.* Edited by F. DUCANE GODMAN and OSBERT SALVIN. Zoölogy, parts 1–15. Botany, parts 1–12. 4to. London, 1879–1882.

We are afforded fresh data concerning the distribution of the Carnivora; the opinion of Dr. V. Frantzius is quoted that the coyote is not indigenous to this region, but spread through Central America subsequent to the Spanish conquest. "He considers it improbable that they should have existed among the thick population of the semi-civilized natives who then occupied the western slopes, and thinks that their invasion may have been coincident with that of the European cattle, which were introduced in the first decade of the sixteenth century." A drawing by Mrs. Salvin of a specimen of common skunk (*Mephitis mephitica*) in the museum of Guatemala is the only positive evidence of the range of this species into Guatemala, as it was not represented in Messrs. Godman and Salvin's collections.

The two Central American tapirs are discussed with considerable detail; although the adult of Baird's tapir was not discovered, both species are figured and their distribution partly ascertained. We are also treated to an excellent colored illustration of the manatee, which is common on the eastern coast; Dampier still remains the best authority as to its mode of life. The two species of peccary are illustrated, and interesting accounts of their habits are given; the collared peccary ranging from " 36° north latitude on the Red river of Arkansas, and as far south as the Rio Negro of Patagonia." In Guatemala " the collared peccary is usually seen in parties of five or six individuals in the forest, but in the early morning they trespass into the clearings." The white-lipped peccary goes in large droves in Guatemala as well as in Costa Rica, where they abound most in " the thick primeval forests of the warmer lowlands," but is also met with in the higher-lying mountain woods.

The antelope is not found south of Sonora and Chihuahua. Mr.

Clark is quoted as stating that in this region "the antelope is said to have an abiding hatred for the rattlesnake, which it decoys first into a striking attitude and then utterly annihilates by leaping into the air and coming down upon the snake with its four sharp-cutting hoofs placed together." (See the illustration in the NATURALIST on p. 179.)

The birds are being treated in the same manner as the mammals by Messrs. Salvin and Godman; the reptiles, amphibians and fishes, by Dr. Günther; the mollusks, by Dr. E. von Martens; the crustacea, by Professor Huxley; the arachnida, by Rev. O. P. Cambridge; the coleoptera, by H. W. Bates and others, including Dr. D. Sharp and C. O. Waterhouse; the hymenoptera, by P. Cameron; the butterflies, by Godman and Salvin, and the moths by H. Druce; the neuroptera, by Mr. McLachlan; the orthoptera, in part, by J. Wood Mason, and the rhynchota, by W. L. Distant. The botanical portion is entirely in the hands of Mr. W. B. Hensley.

RECENT WORKS ON THE MOUTH-PARTS OF FLIES.[1]—The object of this notice is simply to draw attention to some excellent recent works on the structure and morphology of the mouth-parts of insects, particularly the flies. Dr. Dimmock's memoir is largely devoted to the parts of the mosquito's mouth, and is therefore of considerable popular interest; but the author's object was not simply to describe the anatomy of the mouth-parts of this familiar insect alone, but to give a general comparative account of those of Diptera in general. As Dr. Dimmock says: "The few Diptera whose mouth-parts have been the object of the anatomical studies, the results of which are noted in the following pages, were chosen, on the one hand, with especial reference to their presenting a series beginning with a species possessing simple, separate and fully-developed mouth-parts, and ending with a species of which the complexity of the mouth-parts was due to coalescence and incomplete development of their different elements, and, on the other hand, with partial reference to forms whose mouth-parts were of sufficient length to render their study of sections, made with the microtome, of value in determining their relative length, their positions and their attachments. With the above-mentioned objects in view species of the genera Culex, Bombylius, Eristalis and Musca were chosen." The figures are well drawn, with transverse sections of the proboscis and longitudinal sections, showing

---

[1] *The Anatomy of the mouth-parts and of the sucking apparatus of some Diptera.* Dissertation for the purpose of obtaining the Philosophical Doctorate at the Leipzig University. By GEORGE DIMMOCK. Boston, A. Williams & Co., 1881. 4to, pp. 50. 4 plates.

Fluernes Munddele. Trophi Dipterorum. Af FR. MEINERT. Kjöbenhavn, 1881. 4to, pp. 91. 6 plates.

Zur Kenntniss der mundtheile der Dipteren. Von EDUARD BECHER. Besonders abgedruckt aus dem XLV. Bande der Denkschriften der Math.-Naturwissen. classe der K. Akad. der Wissenschaften. Wien, 1882. 4to, pp. 42. 4 plates.